

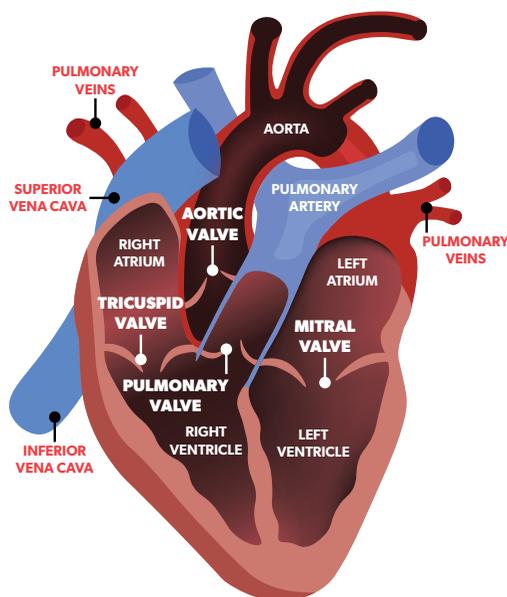
VALVULAR DISEASE

WHY DOESN'T MY HEART VALVE WORK PROPERLY?

The valves in your heart may be damaged due to infection, rheumatic heart disease or birth (congenital) defects. The affected valve leaflets (cusps) may grow thick and brittle from scar tissue or calcium deposits, or they may become thin and weak resulting in an inefficient valve.

There are several terms referring to valve disease.

- **Stenosis** - The opening of the valve becomes smaller, thus allowing less blood to flow through.
- **Regurgitation/Insufficiency (leaky valve)** - The valve does not close properly and allows blood to flow backward as well as forward in the heart.



HOW WILL I FEEL?

Due to the damaged valve, your heart must work harder to pump blood throughout the body. You may tire easily and feel short of breath with less activity or exercise. You may experience an irregular heartbeat due to overstretching of the heart muscle as in mitral stenosis, or dizziness and near fainting due to decreased blood flow to the brain as in aortic stenosis.

HOW WILL MY VALVE BE FIXED?

Depending on the extent of your valve disease, you may need to have the valve repaired or replaced. To repair the valve, your surgeon may perform a commissurotomy or implant a valve ring. A commissurotomy is performed for a tight valve (stenosis). The valve leaflets are cut to loosen the valve slightly, allowing blood to pass easily. Another type of valve repair is a valve ring annuloplasty, which is sewn in place when the valve is leaking (regurgitant or insufficient). The valve leaflets are tucked in place with the ring.

Often the valve cannot be repaired and the surgeon must replace the damaged valve with a tissue (bioprosthetic) or mechanical valve. Tissue valves are valves from animals (e.g., cow, pig). They generally do not require long-term anticoagulation and are not as durable as mechanical valves. Mechanical valves are made from materials such as plastic or metal. They require long-term anticoagulation and are considered extremely durable, lasting longer than tissue valves.

Your surgeon will discuss the need for repair or replacement of the valve with you prior to surgery as well as the type of valve (tissue or mechanical) should replacement be necessary.



ANNULOPLASTY RING



TISSUE VALVE



MECHANICAL VALVE

VALVE REPLACEMENT SURGERY: WHAT ELSE SHOULD I KNOW?

PREVENTION OF VALVE INFECTION

To prevent an infection (endocarditis) from occurring around the new heart valve or ring, you should receive antibiotics before having any procedures that could permit bacteria to enter your body. Among these procedures are:

- All dental procedures (cleaning, filling, removing teeth, root canals, gum or ulcer treatment).
- You may use dental floss. In fact, we encourage you to floss to reduce future tartar build up.
- Any respiratory procedure that involves manipulations of the respiratory tract.

SIGNS AND SYMPTOMS OF COMMON INFECTIONS

Notify your family doctor if you have any of the following signs or symptoms of an infection:

- **Respiratory** - Fever higher than 101°F, or coughing up white, yellow or green-tinged mucus.
- **Urinary** - Fever higher than 101°F, or burning, frequency, urgency or difficulty to urinate.
- **Blood** - Any fever that lasts longer than two days and is accompanied by chills, weakness and a general feeling of ill health.

IDENTIFICATION

You will receive a valve identification card from the valve manufacturer that contains information about the type and size of your heart valve. Carry this with you at all times. **Remember, you must tell any doctor or dentist caring for you about your valve and the need for antibiotics.**

VALVE CLICKING

A mechanical heart valve may produce a clicking sound as it closes. Some patients are more aware of this sound than others. It can be louder with activity or more noticeable when you are resting. As you adjust to the sound, it will become less distracting.

BLOOD THINNERS

A mechanical heart valve requires long-term anticoagulation. You will be started on a blood thinner after your surgery which will be further monitored by your cardiologist or primary care physician.

